Decision, June 29, 1915

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COPY Final Hearing June 29, 1915.

In the United States Patent Office.

Patent Interference N o 34,455.

Bell, Baldwin, McCurdy, Curtiss, and Selfridge (Administrator Estate of Thomas E. Selfridge, deceased) v. Myers.

Flying Machines.

Patent granted Alexander Graham Bell, Frederick W. Baldwin, John A. Douglas McCurdy, Glenn H. Curtiss, and Edward A. Selfridge (administrator estate of Thomas E. Selfridge, deceased) Dec. 5, 1911, N o 1,011,106; application Serial N o 488,779, filed Apr. 8, 1909.

Application of George Francis Myers filed Oct. 31, 1911, Ser. N o 657, 719; division of Ser. N o 466,808, filed Dec. 5, 1908.

Messrs. Mauro, Cameron, Lewis & Massie for Bell, Baldwin, McCurdy, Curtiss, and Selfridge.

Mr. George Francis Myers, pro se .

This interference involves (1) a patent (N o 1,011,–106) to Alexander Graham Bell, Frederick W. Baldwin, John A. Douglas McCurdy, Glenn H. Curtiss, and Edward A. Selfridge (administrator of the estate of Thomas E. Selfridge, deceased), granted December 5, 1911, on an application filed April 8, 1909; and (2) an application of George

Francis Myers, filed October 31, 1911, the same being a division of an application filed by him on December 5, 1908.

The invention which forms the subject matter of this interference relates to a flying machine and more particularly consists of means for maintaining or restoring the lateral 2 equilibrium thereof. The invention is clearly defined in the issue, comprised of twenty counts, of which the following will suffice as examples:

1. In a flying machine, the combination of a supporting surface having a positive angle of incidence, a pair of lateral balancing rudders, one on each side of the medial fore and aft line of the structure and each of said rudders normally having a zero angle of incidence and connections between said rudders.

9. In a flying machine, the combination of a supporting surface having a positive angle of incidence, a pair of lateral balancing rudders, one arranged on either side of the medial fore and aft line of the machine, means normally supporting said lateral balancing rudders at a zero angle of incidence, and means operating to simultaneously shift said balancing rudders to equal and opposite angles of incidence.

16. In a flying machine, the combination of a plurality of suitably spaced supporting surfaces having a positive angle of incidence, means uniting said supporting surfaces, a pair of lateral balancing rudders, one on each side of the medial fore and aft line of the structure and outside of the marginal extremities of said supporting surfaces and each of said rudders normally having a zero angle of incidence, and a single controlling lever operatively connected to both of said rudders and having a part in operative relation with the person of the aviator.

17. In a flying machine, the combination of a plurality of suitably spaced supporting surfaces having a positive angle of incidence, a member projecting outside of the lateral marginal line of said surfaces, a rudder fulcrumed to each of said projecting members and normally having a zero angle of incidence, and means for operating said rudders.

18. In a flying machine, the combination of a pair of superposed supporting surfaces having a positive angle of incidence, means uniting said supporting surfaces into a rigid non-flexing structure, a pair of lateral balancing rudders normally having a zero angle of incidence, one on each side of the medial fore and aft line of the structure and outside of the marginal extremities of said supporting surfaces, means connecting said rudders together whereby a movement of one imparts a reverse movement to the other, and operating means connected to both of said rudders.

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Myers is the senior party by virtue of his application of December 5, 1908, filed some months prior to the filing date of the application on which the Bell et al . patent was granted. Certain testimony was taken by Myers, but since he has failed to print any of this testimony and has not been excused from printing, it cannot be considered. Myers was not represented during the taking of testimony on behalf of his opponents, or at the final hearing. He has filed no brief. In his preliminary statement, however, he claims that he reduced to practice the invention defined in several counts of the issue by the filing of an application on January 29, 1897. No evidence has been presented as to the contents of that application. The records of the Office show that Myers files an application (N o 621, 233) on the date mentioned by him, but that said application became abandoned on February 20, 1907. Even should that application be found to disclose the invention it could only avail the party Myers as evidence of conception (Trufant v. Prindle v. Brown, 111 O. G., 1035). It is really immaterial whether or not the abandoned application contains such a disclosure. For there being no evidence to show the slightest activity on the part of Myers between February 20, 1907, and December 5, 1908, during which period, as will presently appear, Bell et al . entered the field and reduced to practice, he must certainly be regarded as lacking in diligence and would obtain no particular advantage therefrom. In the absence of proofs, therefore, Myers is restricted to December 5, 1908, for conception and constructive reduction to practice.

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Bell et al . have presented proofs to establish the dates alleged in their preliminary statements, the dates so alleged being as follows:

Conception April 6, 1908

Disclosure April 6, 1908

Drawings August 12, 1908

Reduction to Practice June 15, 1908.

Alexander Graham Bell testifies that he has long been interested in aerial locomotion; that some years ago he began experiments with kite constructions with the idea of building one of sufficient power to carry a man; and that after considerable experimentation with large kites he reached the determination to build a kite having sufficient lifting power to carry a man and an engine and capable of being propelled through the air by the latter. Before carrying out this plan, however, he says he consulted with two engineers (McCurdy and Baldwin), and with Curtiss, who was then engaged in the manufacture of light motors for motor cycles. The witness further testifies that after some further experiments with tetrahedral kite structures he and his associates, McCurdy, Baldwin, Curtiss and Selfridge, on October 1, 1907, organized the Aerial Experiment Association with the object of using their combined efforts to devise and construct a practical aerodrome that would carry a man into the air, propelled by its own power.

A detailed account of the activities of the association is given by Mr. Bell and Mr. Curtiss. From their testimony, fully corroborated by the testimony of Robert E. Patterson, aeronautical engineer, and Henry Kleckler, factory superintendent of the Curtiss Aeroplane Company, it appears that the Aerial 5 Experiment Association began operations at Hammondsport, New York, during the winter of 1907–8; that a glider was first built and experimented with; and that this was followed by several other machines, each having two main spaced horizontal supporting surfaces or planes rigidly connected together and

provided with a motor mounted between said surfaces. The first of these machines, known as the “Red Wing”, had no means for accomplishing lateral balancing of the machine other than the concavity of the under side of the upper plane and a certain flexibility given to the rear ends of the tips of the supporting surfaces. This machine did not possess sufficient automatic stability and was destroyed during a flight on March 17, 1908. The evidence shows that the construction of a second machine similar to the “Red Wing” was begun immediately. Bell and Curtiss testify that, as the result of conferences of the joint inventors converning the question of an efficient lateral balancing means, it was decided to equip this machine, the “White Wing”, with movable surfaces pivoted at the lateral marginal extremities of the planes and under control of the operator. Although the original idea is said to have been to place these lateral balancing members at a neutral, or zero, angle relative to the normal line of flight, this plan was not followed out in the “White Wing” owing to the insufficient lifting power of that machine, the ailerons thereon being given the same (positive) angle of incidence as the supporting surfaces. This machine was flown in May, 1908, and, like the “Red Wing”, was destroyed during a flight in the latter part of that month.

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The evidence further shows that in June, 1908, a third motor-driven aeroplane, the “June Bug”, was built, its construction being in all substantial respects the same as that of the “White Wing”. The ailerons on the “June Bug” were at first arranged exactly as they were on the “White Wing” and for the same reason. But it clearly appears from the testimony of Patterson, Kleckler, and the two joints applicants, Bell and Curtiss, that about June 25, 1908, the supporting surfaces of the machine, which were porous and leaked air, were varnished and the lifting power of the machine being found to be materially increased, the ailerons were placed at a zero angle of incidence. As thus changed both Bell and Curtiss declare that the “June Bug” was flown successfully a number of times in June and July, 1908, on one of its flights, on July 4, 1908, winning the trophy offered by the “Scientific American” for the first flight of one kilometer distance by a heavier-than-air machine.

Ample proof in substantiation of these claims of actual successful flight of the “June Bug” is found in the deposition of Shelton T. Cameron, the attorney who prepared the application filed by Bell et al ., and in the testimony of the witnesses Patterson and Kleckler, both of whom assisted in the building of the “June Bug” and were entirely familiar with its construction and operation. Both Patterson and Kleckler testify that after the ailerons had been changed the “June Bug” was flown repeatedly both before and after July 4, 1908, and that they witnessed all of these flights, as well as that which occurred on July 4. Cameron says he was in Hammondsport on July 8, 1908, made a very careful study of 7 the construction of the machine designated the “June Bug” and witnessed a flight of that machine with Curtiss as aviator. The flight, he says, was made with perfect balance, the machine being tilted to the right or left at the will of the aviator and then returned to an even keel and a perfectly balanced landing accomplished. The descriptions given by all the witnesses of the construction of the “June Bug” at the time of the flights referred to show conclusively that it fully satisfied every count of the issue. In fact it appears that Figs. 1, 4, 6 and 7 of the drawings of the Bell et al . application, which show the form of invention specified in the issue, were made by the witness Walter A. Williams directly from the “June Bug” itself.

The evidence clearly shows that Bell et al ., by the building and successful operation of an aeroplane embodying the complete invention in issue, accomplished an actual reduction to practice at least as early as July, 1908. Since Myers has no established date of either conception or reduction to practice prior to his filing date of December 5, 1908, and since Myers, even if entitled to a date of conception prior to that proved by Bell et al ., was clearly lacking in diligence, it is evident that he cannot prevail.

Priority of invention of the subject matter at issue herein is awarded to Alexander Graham Bell, Frederick W. Baldwin, John A. Douglas McCurdy, Glenn H. Curtiss, and Edward E. Selfridge (administrator of the estate of Thomas A. Selfridge, deceased), the junior party.

Limit of appeal: October 22, 1915.

H. E. Stauffer, Examiner of Interferences.

October 2, 1915.